



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/617,229	07/11/2003	Young-Chan Kim	1293.1854	2343

21171 7590 01/04/2006

STAAS & HALSEY LLP
SUITE 700
1201 NEW YORK AVENUE, N.W.
WASHINGTON, DC 20005

EXAMINER

RAHMJOO, MANUCHER

ART UNIT	PAPER NUMBER
----------	--------------

2676

DATE MAILED: 01/04/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/617,229	Applicant(s) KIM, YOUNG-CHAN	
	Examiner Mike Rahmjoo	Art Unit 2676	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 December 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 1- 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over King et al (US Patent 5,644,325), hereinafter, King in view of Yamakawa et al (US Patent 5,809,366), hereinafter, Yamakawa.

As per claims 1, 4- 5, 7, 11- 12 and 14 and as to the broadest reasonable interpretation by examiner, King teaches receiving RGB signals from host see for example figures 10- 11; and selecting an R,G,B signal including video signal see for example column 5 lines 38- 40 and setting a region (color key range) of the selected R,G,B signal to be checked see for example column 7 line 25.

However King does not teach detecting a minimum pixel level value in the checked region of the selected R,G,B signal; and comparing the minimum pixel level value for the selected R,G,B signal with a predetermined threshold value and checking whether an abnormal R,G,B signal includes an abnormal signal; and displaying on a screen a message indicator indicating whether the selected R,G,B signal; and signal

input unit receiving RGB signals, a horizontal and vertical synchronization signal; and a storage unit storing the minimum pixel level value detected in the selected R,G,B signal.

Yamakawa teaches detecting (state detection through determination) a minimum pixel level value in the checked region of the selected R,G,B signal see for example column 14 lines 27- 31 for points deviated by more than an allowable range; comparing the minimum pixel level value for the selected R,G,B signal with a predetermined threshold value (previous RGB data or allowable range) and checking whether an abnormal R,G,B signal includes an abnormal signal see for example column 14 lines 35- 38 wherein RGB data is compared with previous RGB data and correction is based on the results of comparison; and displaying on a screen a message indicator (displaying a warning) indicating whether the selected R,G,B signal see for example column 14 lines 27- 35 through displaying a warning (a flag generated by the color calibration system) due to deviation by more than an allowable range OR improper reading of data; and signal input unit receiving RGB signals, a horizontal and vertical synchronization signal see for example figures 3- 5 for the color calibration system; a storage unit storing the minimum pixel level value detected in the selected R,G,B signal see for example the color calibration system of figures 4- 5.

It would have been made obvious to one of ordinary skilled in the art at the time the invention was made to incorporate the teachings of Yamakawa into King to perform minimum pixel level detection and comparison with a predetermined threshold value and thereafter displaying of a screen message as to provide a color balance selection method which allows a user to select the color balance relative to the

calibrated standard of an image processing device and therefore reproduce colors contained in a specific image chosen by a user and thereby offer an efficient and user friendly device see for example column 2 lines 7-23.

As per claims 2 and 9 Yamakawa teaches setting a flag (warning) which indicates whether the selected R,G,B signal is abnormal when the minimum pixel level value is smaller (deviation by more than an allowable range) than a predetermined threshold value see for example column 14 line 32, and resetting (execute scanning again or repeat the process) the flag when the minimum pixel level value is larger (deviation by more than an allowable range) than the predetermined threshold value see for example column 14 lines 32- 33.

As per claim 3 and 10 Yamakawa teaches checking whether a flag indicating whether the selected R,G,B signal is abnormal is set see for example figure 17 for the loop in the flow chart regarding the display warning block 494; checking if a video signal checking function is enabled when the flag is set see for example figure 17 (block 490) for the flow chart regarding color determination (checking) of the colors of the printed frames; and inherently teaches setting how long the message will be displayed and how long a predetermined warning message is displayed, when enabling of the video signal checking function is confirmed see for example column 14 lines 41- 46 through the clock of the color calibration system which reduces the time (time setting for displaying a message) needed to perform the color balance adjustment along with reducing a load imposed on the processing system.

As per claims 6 and 15 and as to the broadest reasonable interpretation by examiner Yamakawa teaches the controller generates an on-screen-display (OSD) signal (displaying a warning) that enables and disables (the flow chart of figure 17) an R,G,B signal checking function.

As per claim 8 and as per rejection of the independent claims Yamakawa teaches extracting a minimum pixel level value when the pixel level value in the selected R,G,B signal is smaller than the predetermined value see for example figure 21 and column 14 lines 27- 30 for points 530- 533 when there is deviation more than a allowable range.

As per claim 13 and as per rejection of the independent claims Yamakawa teaches a comparator (color calibration system) comparing the minimum pixel level value in the selected R,G,B signal with a minimum pixel level value detected in a previous signal (see for example column 14 line 36 for comparing RGB data with previous RGB data), and extracts a minimum pixel level value see for example column 14 lines 30- 31 for improper reading or inputting due to deviation by more than an allowable range.

Response to Arguments

Applicant's arguments filed 12/13/2005 have been fully considered but they are not persuasive.

As per applicant's remarks on page 7, applicant argues "the narrow color key range of King et al asserted by the office action is the range to which the analog output is compared" and "the narrow key range does select a region of an RGB signal to be checked".

Examiner respectfully disagrees.

As to the broadest reasonable interpretation by examiner "a region of the selected RGB signal" can be what is displayed for example on monitor 58 of fig. 3. As per citation made of the record in the previous lines 28- 30 recite "the motion video picture is displayed in the video window 56". Furthermore as per specification of King in column 6 lines 60- 67 "selected position and size information for the video window 56 may be used by memory controller 63 to store bit mapped video data...corresponding to the pixels in the video window 56". Said video window 56 clearly reads on applicant's claimed "region of the selected RGB signal".

Inquiry

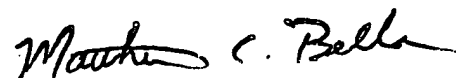
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mike Rahmjoo whose telephone number is (571) 272-7789. The examiner can normally be reached on 6:30- 3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Bella can be reached on (571) 272- 7778. The fax phone number for the organization where this application or proceeding is assigned is (571) 273- 8300 for regular communications and After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4750.

Mike Rahmjoo

December 21, 2005



MATTHEW C. BELLA
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600